UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,635	07/16/2003	Myles Kimmitt	2333-US-C	1709

56436   7590   03/19/2007
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EXAMINER
SU, BENJAMIN

ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

Office Action Summary	Application No.	Applicant(s)
	10/620,635	KIMMITT, MYLES
	Examiner	Art Unit	
	Benjamin Su	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _16 July 2003_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1 and 2_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 and 2_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _16 July 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _10/17/2003_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The lengthy specification has not been checked to the extent necessary to

determine the presence of all possible minor errors. Applicant's cooperation is

requested in correcting any errors of which applicant may become aware in the

specification.

2.   Applicant is reminded of the proper language and format for an abstract of the
disclosure.

The abstract should be in narrative form and generally limited to a single
paragraph on a separate sheet within the range of 50 to 150 words. It is important that
the abstract not exceed 150 words in length since the space provided for the abstract
on the computer tape used by the printer is limited. The form and legal phraseology
often used in patent claims, such as "means" and "said," should be avoided. The
abstract should describe the disclosure sufficiently to assist readers in deciding whether
there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information
given in the title. It should avoid using phrases which can be implied, such as, "The
disclosure concerns," "The disclosure defined by this invention," "The disclosure
describes," etc.

3.   The abstract of the disclosure is objected to because it has more than 150 words.

Correction is required. See MPEP § 608.01(b).

Claim Objections

4.   Claim 2 is objected to because of the following informalities:

For claim 2, line 2, the term "width width parallel data" should be changed to ---

width parallel data---. Appropriate correction is required.

Double Patenting

5.   Claims 1, 2 are rejected on the ground of nonstatutory obviousness-type double

patenting as being unpatentable over claims 1, 30of U.S. Patent No. 6618395 in view of

Buchanan et al (US 6970435).

Claim 1 of U.S. Patent No 6618395 discloses, regarding claim 1, a method for

transporting data across a plurality of data channels comprising:

generating a plurality of lesser width parallel data words containing parallel data

from a greater width parallel data word (see column 19, lines 28 – 29), wherein the

number of bits in said greater width parallel data word is greater than the number of bits

in each of said lesser width parallel data words (see column 19, lines 28 – 29, it is

implied each lesser width data word has fewer number of bits than the wide parallel

data word) ; serializing parallel data representative of said plurality of lesser width

parallel data words (see column 19, lines 30 – 32); and transmitting said serialized data

words over a corresponding plurality of distinct serial data channels (see column 19,

lines 51 – 52).

Claim 1 of U.S. Patent No 6618395 fails to teach concurrently, such that all

adjacent bits of said greater width parallel data word are contained in different ones of

said lesser width parallel data words.

Buchanan et al. from the same or similar fields of endeavor teach concurrently,

such that all adjacent bits of said greater width parallel data word are contained in

different ones of said lesser width parallel data words (see column 5, lines 18 – 21, 60 –

64 wherein the output is in the order, 3-2-1-0 implies bit 3 comes from data stream

DATAIN0, bit 2 comes from data stream DATAIN1, bit 1 comes from DATA stream

DATAIN2, bit 0 comes from data stream DATAIN3, which correspond to adjacent bits of

the greater width parallel data words are contained in different ones of the lesser width

parallel data words).

Thus, it would have been obvious to a person of ordinary skill in the art at the

time of the invention to use concurrently, such that all adjacent bits of said greater width

parallel data word are contained in different ones of said lesser width parallel data

words in the method taught by U.S. Patent No 6618395 in order to allow efficient

processing by partitioning the large parallel word into multiple smaller parallel words

(see Buchanan et al. column 4, lines 51 – 53).

Claim 30 of U.S. Patent No 6618395 discloses, regarding claim 2, a method for

transporting data across a plurality of data channels comprising:

generating a plurality of lesser width parallel data words containing parallel data

from a greater width parallel data word (see column 22, lines 56 – 57), wherein the

number of bits in said greater width parallel data word is greater than the number of bits

in each of said lesser width parallel data words (see column 22, lines 56 – 57, it is

implied each lesser width data word has fewer number of bits than the wide parallel

data word);

scrambling the parallel data in said lesser width parallel data words to form a

plurality of scrambled data words (see column 22, lines 60 – 63);

serializing said scrambled data words (see column 23, lines 16 – 17);

and transmitting said serialized scrambled data words over a corresponding plurality of

distinct serial data channels (see column 23, lines 17 – 19).

Claim 30 of U.S. Patent No 6618395 fails to teach concurrently, such that all

adjacent bits of said greater width parallel data word are contained in different ones of

said lesser width parallel data words.

Buchanan et al. from the same or similar fields of endeavor teach concurrently,

such that all adjacent bits of said greater width parallel data word are contained in

different ones of said lesser width parallel data words (see column 5, lines 18 – 21, 60 –

64 wherein the output is in the order, 3-2-1-0 implies bit 3 comes from data stream

DATAIN0, bit 2 comes from data stream DATAIN1, bit 1 comes from DATA stream

DATAIN2, bit 0 comes from data stream DATAIN3, which correspond to adjacent bits of

the greater width parallel data words are contained in different ones of the lesser width

parallel data words).

Thus, it would have been obvious to a person of ordinary skill in the art at the

time of the invention to use concurrently, such that all adjacent bits of said greater width

parallel data word are contained in different ones of said lesser width parallel data

words in the method taught by U.S. Patent No 6618395 in order to allow efficient

processing by partitioning the large parallel word into multiple smaller parallel words

(see Buchanan et al. column 4, lines 51 – 53).

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7.   Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Buchanan et

al.

Buchanan et al. disclose, regarding claim 1, a method for transporting data

across a plurality of data channels comprising:

concurrently generating a plurality of lesser width parallel data words containing

parallel data from a greater width parallel data word (see column 4, lines 54 – 56, 62 –

64) such that all adjacent bits of the greater width parallel data word are contained in

different ones of the lesser width parallel data words (see column 5, lines 18 – 21, 60 –

64 wherein the output is in the order, 3-2-1-0 implies bit 3 comes from data stream

DATAIN0, bit 2 comes from data stream DATAIN1, bit 1 comes from DATA stream

DATAIN2, bit 0 comes from data stream DATAIN3, which correspond to adjacent bits of

the greater width parallel data words are contained in different ones of the lesser width

parallel data words) wherein the number of bits in the greater width parallel data word is

greater than the number of bits in each of the lesser width parallel data words (see

column 4, lines 55 – 56);

serializing parallel data representative of the plurality of lesser width parallel data

words (see column 4, lines 62 – 64);

and transmitting the serialized data words over a corresponding plurality of

distinct serial data channels (see column 5, lines 16 – 17).

Claim Rejections - 35 USC § 103

8.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchanan et al. in view of Nishida et al. (US 5978486).

Buchanan et al. disclose, regarding claim 2, all the subject matter of the claimed Invention as recited in paragraph 7 of this office action.

Buchanan et al. fail to disclose scrambling the parallel data in the lesser width parallel data words to form a plurality of scrambled data words.

Nishida et al. from the same or similar field of endeavors teach scrambling the parallel data in the lesser width parallel data words to form a plurality of scrambled data words (see column 18, lines 33 – 36).

Thus, it would have been obvious to a person of ordinary skill in the art at the time of invention to use scrambling the parallel data in the lesser width parallel data words to form a plurality of scrambled data words in the method taught by Buchanan et al. in order to allow easy clock recovery by averaging changes in amplitude, polarity, and phase of a transmitted signal (see column 1, lines 26 – 29).

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ferguson (US 5056087), Kim et al. (US 5940018) are cited to show methods which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Su whose telephone number is 571-270-1423. The examiner can normally be reached on Monday - Friday 10 - 3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BZS

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER